# W.R. Meadows of Arizona Inc. Permit Number V98-004 April 19, 2004

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# Permit Conditions W.R. Meadows of Arizona Inc. V98-004 April 19, 2004

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

#### **GENERAL CONDITIONS:**

# 1. **AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]

The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or State Implementation Plan (SIP) Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).

#### 2. **CIRCUMVENTION:** [County Rule 100 § 104] [40 CFR 60.12] [40 CFR 63.4(b)]

The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.

# 3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:

[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e] Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

#### 4. **COMPLIANCE**:

A. COMPLIANCE REQUIRED:

- The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]

  [County Rule 210 § § 301.8b(4) & 302.1h(1)]
- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 §302.1h(2)]

3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.2]

4) For any major source operating in a nonattainment area designated as serious for PM<sub>10</sub>, for which the source is classified as a major source for PM<sub>10</sub>, the source shall comply with the best available control technology (BACT), as defined in County Rule 100.

[County Rule 210 §302.1(h)(7)]

- B. COMPLIANCE CERTIFICATION REQUIREMENTS: [County Rule 210 §305.1d] The Permittee shall file an annual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:
  - 1) The identification of each term or condition of the permit that is the basis of the certification;
  - 2) The compliance status;
  - 3) Whether compliance was continuous or intermittent;
  - 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter.

#### C. COMPLIANCE PLAN:

[County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the first date of public notice of the proposed conditions for this Permit unless a compliance plan is included in the Specific Conditions section of this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the

term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

#### 5. CONFIDENTIALITY CLAIMS:

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
- B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.

The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

[County Rule 100 §402] [County Rule 200 §411]

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

[County Rule 100 §402]

If the Permittee submits information with an application under a claim of confidentiality under ARS §49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

## 6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

## A. ACID RAIN: [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]

- 1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.
  - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.
  - b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.

- c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.
- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:
  - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
  - (2) Exceedances of applicable emission rates.
  - (3) The use of any allowance prior to the year for which it was allocated.
  - (4) Violation of any other provision of the permit.
- B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8 locally enforceable only] The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.
- C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68] Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.
- D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G] If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

- 7. **DUTY TO SUPPLEMENT OR CORRECT APPLICATION:** [County Rule 210 §301.6] If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.
- 8. EMERGENCY EPISODES: [County Rule 600 §302] [SIP Rule 600 §302]

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If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 § 302.

#### 9. EMERGENCY PROVISIONS:

[County Rule 130 §§201 & 402]

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210 §302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### 10. EXCESS EMISSIONS:

[County Rule 140 §§103, 401 & 402]

NOTE: There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 §200.

- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:
  - 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
  - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
  - 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
  - 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection

308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.

- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
  - 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
  - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
  - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
  - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
  - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
  - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
  - 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
  - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
  - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
  - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.

#### C. Affirmative Defense For Startup And Shutdown:

- 1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
  - a. The excess emissions could not have been prevented through careful and prudent planning and design;

- b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
- c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
- g. All emissions monitoring systems were kept in operation, if at all practicable; and
- h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.
- D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph B.of this Permit Condition.
- E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.
- 11. **FEES:** [County Rule 200 §409] [County Rule 210 §§302.1i & 401] The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.
- Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

#### 13. MONITORING / TESTING:

A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if

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required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.

[County Rule 200 §309] [SIP Rule 41]

B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 §408] [County Rule 210 §302.1.c] [County Rule 270 §§300 & 400] [SIP Rule 27]

- C. The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:
  - 1) Sampling ports adequate for test methods applicable to such source.
  - 2) Safe sampling platform(s).
  - 3) Safe access to sampling platforms(s).
  - 4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

#### 14. PERMITS:

#### A. BASIC:

[County Rule 210 §302.1h(3)]

This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

# B. DUST CONTROL PLAN REQUIREMENTS:

- (NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)
- 1) The Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any routine dust generating operation.

[County Rule 310 §303.3] [SIP Rule 310 §303.3]

2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.

[County Rule 310 §303.4] [SIP Rule 310 §303.4]

3) Any Dust Control Plan shall, at a minimum, contain all the information described in Section 304 of Rule 310.

[County Rule 310 §§303.1 & 304] [SIP Rule 310 §§303.1 & 304]

4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times.

[County Rule 310 §303] [SIP Rule 310 §303]

C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.

[County Rule 200 §§301 & 308] [County Rule 210 §§301.4a, b, c, & 400]

2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.

[County Rule 210 §§303.1a, 303.2, 405.4, & 406.4]

3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

4) No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

#### D. POSTING:

1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311]

2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

[County Rule 310 §401] [SIP Rule 310 §401]

E. PROHIBITION ON PERMIT MODIFICATION: [County Rule 200 §310] The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

#### F. RENEWAL:

The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §\$301 & 302.3.

[County Rule 210 §§301.2a, 301.4a, b, c, d, h & 302.3]

The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.

[County Rule 200 §§308 & 309] [County Rule 210 §301.1]

3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 §403.2] [County Rule 210 §§301.4f & 301.9]

# G. REVISION / REOPENING / REVOCATION:

This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[County Rules 200 §402.1]

Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit)* and shall reset the five year permit term.

[County Rules 200 §402.1a(1) & 210 §302.5]

- 2) This permit shall be reopened and revised under any of the following circumstances:
  - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.
  - b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[County Rule 210 §302.1h(3)]

#### H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only] adard promulgated by the Administrator under Section

If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

#### I. REQUIREMENTS FOR A PERMIT:

Air Quality Permit: Except as noted under the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

# 2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

W.R. Meadows of Arizona Inc.

V98-004

April 19, 2004

Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 § \$302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

#### J. RIGHTS AND PRIVILEGES:

[County Rule 210 §302.1h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

#### K. SEVERABILITY:

[County Rule 210 §302.1g]

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

#### L. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.
- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]

[County Rule 210 §407.2]

#### M. TERM OF PERMIT:

[County Rule 210 §§302.1a & 402]

This Permit shall remain in effect for no more than 5 years from the date of issuance.

#### N. TRANSFER:

[County Rule 200 §404]

Except as provided in ARS §49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures under County Rule 210.

#### 15. **RECORDKEEPING:**

A. RECORDS REQUIRED: [County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A] The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

#### B. RETENTION OF RECORDS:

Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted

[County Rule 100 §504] [SIP Rule 40 C]

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1d(2)]

#### C. MONITORING RECORDS:

[County Rule 210 §§302.1d(1) & 305.1b]

Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The name of the company or entity that performed the analysis;
- 4) The analytical techniques or methods used;
- 5) The results of such analysis; and
- 6) The operating conditions as existing at the time of sampling or measurement.
- D. RIGHT OF INSPECTION OF RECORDS: [County Rule 100 § 106] [SIP Rule 40 D] When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

#### 16. REPORTING:

*NOTE:* See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

A. ANNUAL EMISSION INVENTORY REPORT: [County Rule 100 §505] [SIP Rule 40 B] Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03 and ARS §49-480.04.

B. DATA REPORTING:

[County Rule 100 §502]

When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

# C. DEVIATION REPORTING: [County Rule 210 §§302.1e & 305.1c]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

#### D. EMERGENCY REPORTING:

[County Rule 130 §402.4]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

# E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of  $NO_x$  and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

- F. EXCESS EMISSIONS REPORTING: [County Rule 140 §500] [locally enforceable only] (NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)
  - 1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
    - a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.
    - b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.
  - 2) The excess emissions report shall contain the following information:
    - a) The identity of each stack or other emission point where the excess emissions occurred:
    - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
    - c) The time and duration or expected duration of the excess emissions;
    - d) The identity of the equipment from which the excess emissions emanated;
    - e) The nature and cause of such emissions;
    - f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
    - g) The steps that were or are being taken to limit the excess emissions; and
    - h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.
  - 3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.

## G. OTHER REPORTING:

[County Rule 210 §302.1h(5)]

The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

#### 17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS relating to the emission or control prescribed pursuant thereto, may

enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

[County Rule 100 §105]

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

[County Rule 210 §305.1f] [SIP Rule 43]

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

[County Rule 210 §305.1f] [SIP Rule 43]

C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

[County Rule 210 §305.1f] [SIP Rule 43]

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

[County Rule 210 §305.1f] [SIP Rule 43]

E. To record any inspection by use of written, electronic, magnetic, and photographic media.

[County Rule 210 §305.1f] [Locally enforceable only]

#### SPECIFIC CONDITIONS

# 18. ALLOWABLE EMISSIONS LIMITATIONS

The allowable emission limitations of these Permit Conditions are based upon the facility as presently constructed and operated. They do not provide for facility changes or changes in the method of operation that would otherwise trigger new applicable requirements including New Source Review (NSR) or Best Available Control Technology (BACT).

# A. Facility-Wide Requirements

- 1) Opacity
  - a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300§302.

[County Rule 300§301][locally enforceable only]

b) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

2) Gaseous and Odorous Emissions: The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[County Rule 320 § 300][SIP Rule 32A]

## B. Emission Limit for Fiberboard Saturation Process, Cure Plant and Hot Oil Heater

1) The Permittee shall not allow total emissions from the Fiberboard Saturation Process, Cure Plant and Hot Oil Heater to be emitted into the atmosphere in excess of any of the following limits:

Pollutant	Monthly Emissions Limit	Twelve Month Rolling Emission Limit*
VOC	16,000 pounds per month	96 tons per year

<sup>\*</sup> The rolling twelve-month emissions shall be calculated by summing the total emissions over the most recent twelve calendar months

[County Rule 210§302.1b]

# C. Opacity Limit for Fugitive Dust Sources (unpaved haul/access road, unpaved parking lot, open areas)

The Permittee shall not allow visible fugitive dust emissions to exceed 20% opacity. Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:

- 1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
  - a) Cease dust-generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
  - b) Apply water or other suitable dust suppressant twice per hour; or
  - c) Apply water as necessary to maintain a soil moisture content at a minimum of 12% as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12% as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content.
- 2) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
- 3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and
- 4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301 and Table 2][SIP Rule 310 §301 and Table 2]

#### 19. OPERATIONAL LIMITATIONS/STANDARDS:

# A. Facility-wide Operational Requirements

Material Containment Required: Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320 §302][SIP Rule 32C]

2) Stack Requirements: Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[County Rule 320 §303] [SIP Rule 32D]

.. , .

#### B. Operational Requirements for Cure Plant

1) The Permittee shall not apply, sell, offer for sale or manufacture for sale after July 13, 1991, any architectural coating that exceeds the following limits listed below. Limits are expressed in pounds of VOC per gallon of coating as applied, excluding water and any colorant added to tint bases. :

Coating	<u>lb/gal</u>
Concrete Curing Compounds	2.9
Dry Fog Coating	
Flat	3.5
Non-flat	3.3
Enamel Undercoaters	2.9
General Primers, Sealers and Undercoaters	2.9
Industrial Maintenance Primers and Topcoats	
Alkyds	3.5
Catalyzed Epoxy	3.5
Bituminous Coating Materials	3.5
Inorganic Polymers	3.5
Vinyl Chloride Polymers	3.5
Chlorinated Rubbers	3.5
Acrylic Polymers	3.5
Urethane Polymers	3.5
Silicones	3.5

Unique Vehicles	3.5
Lacquers	5.7
Opaque Stains	2.9
Wood Preservatives	2.9
Quick Dry Enamels	3.3
Roof Coating	2.5
Semi-transparent Stains	2.9
Semi-transparent and Clear Wood Preservatives	2.9
Opaque Wood Preservatives	2.9
Specialty Flat Products	3.3
Specialty Primers, Sealers and Undercoaters	2.9
Stains, All 1	
Traffic Coatings	
Applied to Public Streets and Highways	2.1
Applied to Other Surfaces	2.1
Black Traffic Coatings	2.1
Varnishes	
Waterproof Mastic Coating	
Waterproof Sealers	
Wood Preservatives Except Below Ground <sup>1</sup>	

<sup>&</sup>lt;sup>1</sup> These italicized Coatings are not formally not part of Rule 335 but are alphabetized repeats of listed coatings.

[County Rule 335§305][SIP Rule 335§305]

2) Exemptions: [County Rule 335 §§306, 307][SIP Rule 335 §§306, 307]

The VOC content requirement of this Permit Condition shall not apply to the following:

- a) Architectural coatings supplied in containers having capacities of one quart or less
- b) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
  - (1) Below ground wood preservative coatings.
  - (2) Bond breakers.
  - (3) Fire retardant coatings.
  - (4) Graphic arts coatings (sign paints)
  - (5) Mastic texture coatings.
  - (6) Metallic pigmented coatings.
  - (7) Multi-colored paints.
  - (8) Quick-dry primers, sealers and undercoaters.
  - (9) Shellacs.
  - (10) Swimming pool paints.
  - (11) Tile-like glaze coatings

## C. Operational Requirements for Fugitive Dust Sources

- 1) Stabilization Requirements
  - a) Unpaved Parking Lot
    - (1) The Permittee shall not allow visible fugitive dust emissions from the Unpaved Parking Lot to exceed 20% opacity and either;
      - (a) shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
      - (b) shall not allow the silt content to exceed 8%
  - b) Unpaved Haul/Access Road
    - (1) The Permittee shall not allow visible dust emissions from the unpaved Haul/Access Road to exceed 20% opacity and either;
      - (a) shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
      - (b) shall not allow the silt content to exceed 6%
    - (2) The Permittee shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. If complying with subsection 302.2(b) of County Rule 310 and this permit condition, the Permittee must include, in their Dust Control Plan, the number of vehicles traveled on the unpaved haul/access road (i.e. number of employee vehicles, earthmoving equipment, haul trucks and water trucks)

[County Rule 310\\$302.2][County SIP Rule 310\\$302.2]

c) Open Area And Vacant Lot or Disturbed Surface Area

The Permittee of an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall meet at least 1 of the standards described in subsection 19.C.c)(1) through subsection 19.C.c)(7) below, as applicable (also 302.3(a) through subsection 302.3(g) of County Rule 310). The Permittee of such inactive disturbed surface area shall be considered in violation of this rule if such inactive disturbed surface area is not maintained in a manner that meets at least 1 of the standards described in subsection 19.C.c)(1) through subsection 19.C.c)(7) below, as applicable (also 302.3(a) through subsection 302.3(g) of County Rule 310).

- (1) Maintain a visible crust; or
- (2) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher; or
- (3) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or
- (4) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or
- (5) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- (6) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- (7) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator of the Environmental Protection Agency (EPA).

  [County Rule 310§302.3][County SIP Rule 310§302.3]
- 2) Control Measures: The Permittee shall implement control measures before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. See subsection 304.3 of County Rule 310 and Table 1 and Table 2 of County Rule 310. Table 1 and 2 of County Rule 310 are included in this section. These Tables only include those activities from Table 1 and 2 of County Rule 310 for the current routine dust generating operations at the facility. For purposes of these Permit Conditions, any control measure that is implemented must meet the applicable standard(s) described in County Rule 310§301 and §302 (Conditions 18.C. and 19.C.1) of this permit), as determined by the corresponding test method(s), as applicable, and must meet other standard(s) set forth in County Rule 310 and this permit. Failure to comply with the provision of County Rule 308 (Work Practices) and Condition 19.C.4) of this permit, as applicable, and/or of an approved Dust Control Plan, is deemed a violation of this Permit.

[County Rule 310§306][County SIP Rule 310§306]

5) Should any primary control measure(s) in an approved Dust Control Plan prove ineffective, the Permittee shall immediately implement the contingency control measure, which may obviate the requirement of submitting a revised Dust Control Plan. Any control measure that is implemented must meet the applicable standards described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310§§303, 303.2, 303.3(b) and 303.4(a)] [County SIP Rule 310§§303, 303.2, 303.3(b) and 303.4(a)]

- 4) Work Practices: The Permittee shall comply with the following work practices.
  - a) Unpaved Haul/Access Roads: Implement 1 or more control measure(s) in Table 1(Unpaved Haul Access Roads-1C through 5C) of County Rule 310 and this permit, before engaging in the use of or in the maintenance of unpaved haul/access roads. These control measures are as follows:
    - (1) Limit vehicle speed to 15 miles per hour or less and limit vehicular trips to no more than 20 per day.
    - (2) Apply water, so that the surface is visibly moist and subsection 302.2 of County Rule 310 and 19.C.1)a) of these permit conditions is met.
    - (3) Pave
    - (4) Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.2 of County Rule 310 and 19.C.1)a) of these permit conditions.
    - (5) Apply a suitable dust suppressant, in compliance with subsection 302.2 of County Rule 310 and 19.C.1)a) of these permit conditions.

[County Rule 310§308.4]

[County SIP Rule 310§308.4][County SIP Rule 31§6(a)]

- b) Spillage, Carry-out, Erosion, And/Or Trackout
  - (1) Install and maintain a suitable trackout control device(Examples of trackout control devices are described in Table 1 (Trackout-1J, 2J, 3J) of County Rule 310 and this permit that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site at all exits onto a paved public roadway from the disturbed surface area larger than five acres.

Examples of trackout control devices from Table 1 of County Rule 310 and this permit are as follows:

- (a) Install a grizzly or wheel wash system at all access points.
- (b) At all access points, install a gravel pad at least 30 feet wide, 50 feet long, and 6 inches deep.
- (c) Pave starting from the point of intersection with a paved public roadway and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

[County Rule 310§308.3a.][County SIP Rule 310§308.3a.]

- (2) Cleanup spillage, carry-out, erosion, and/or trackout on the following time schedule:
  - (a) Immediately when spillage, carry-out, and/or trackout extends a cumulative distance of 50 linear feet or more or
  - (b) At the end of the work day, when spillage, carry-out, erosion, and/or trackout are other than the spillage, carry-out, erosion, and/or trackout described directly above and in subsection 308.3(b)(1) of County Rule 310.

[County Rule 310§308.3b.][County SIP Rule 310§308.3b.]

#### TABLE 1

#### SOURCE TYPE AND CONTROL MEASURES

# **Vehicle Use In Open Areas And Vacant Lots:**

- 1A Restrict trespass by installing signs.
- 2A Install physical barriers such as curbs, fences, gates, posts, signs, shrubs, and/or trees to prevent access to the area.

# **Unpaved Parking Lots**

- 1B Pave
- Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.1 of County Rule 310.
- 3B Apply a suitable dust suppressant, in compliance with subsection 302.1 of County Rule 310

**Unpaved Haul/Access Roads:** (The control measures listed below (1C-5C) are required work practices, per subsection 308.4 of County Rule 310.)

- 1C Limit vehicle speed to 15 miles per hour or less and limit vehicular trips to no more than 20 per day.
- 2C Apply water, so that the surface is visibly moist and subsection 302.2 of County Rule 310 is met.
- 3C Pave.
- 4C Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.2 of County Rule 310.
- 5C Apply a suitable dust suppressant, in compliance with subsection 302.2 of County Rule 310.

#### **Open Areas And Vacant Lots:**

- 1E Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.
- Pave, apply gravel, or apply a suitable dust suppressant, in compliance with subsection 302.3 of County Rule 310.
- 3E Establish vegetative ground cover in sufficient quantity, in compliance with subsection 302.3 of County Rule 310.

# Control measures below are required work practices and/or methods designed to meet the work practices, per Section 308 (Work Practices) of County Rule 310

# Cleanup Of Spillage, Carry Out, Erosion, And/Or Trackout:

- 1H Operate a street sweeper or wet broom with sufficient water, if applicable, at the speed recommended by the manufacturer and at the frequency(ies) described in subsection 308.3 of County Rule 310; or
- 2H Manually sweep-up deposits.

#### **Trackout:**

- 1J Install a grizzly or wheel wash system at all access points.
- 2J At all access points, install a gravel pad at least 30 feet wide, 50 feet long, and 6 inches deep.
- Pave starting from the point of intersection with a paved public roadway and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

#### TABLE 2

#### SOURCE TYPE AND WIND EVENT CONTROL MEASURES

#### **Dust Generating Operations:**

- 1A Cease dust generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
- Apply water or other suitable dust suppressant twice per hour, in compliance with Section 301 of County Rule 310; or
- Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91(1998) or other equivalent approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or
- 4A Construct fences or 3 foot 5 foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas that reduce the amount of wind-blown material leaving a site. If implementing 4A, must also implement 2A or 3A above.
  - 6) The Permittee shall obtain a revision to his permit before allowing or engaging in the following on a routine basis:
    - a) Bulk material transport, hauling, handling and open storage piles;
    - b) Placement of bulk material onto paved surfaces; and
    - c) Weed Abatement by Discing or Blading
    - d) Earthmoving operations on disturbed surface areas one acre or greater. (Earthmoving activities associated with construction may be conducted after a separate earthmoving permit is obtained from the Control Officer pursuant to County Rule 200 §305)

[County Rule 210§302.1b(1)]

# D. <u>Production Limit on Saturator Unit</u>

The Board Production rate of the Saturator Unit will be limited to a maximum of 66,000 ft<sup>3</sup>/month and 790,000 ft<sup>3</sup>/year based on a 12-month rolling sum.

[County Rule 210§302.1b]

#### E. Smoke Point Limitation on Hot Oil Heater

The Permittee shall not permit, cause or allow the temperature of the heated asphaltic oil to exceed the smoke point temperature stated on the fuel supplier's certificate.

[County Rule 210§302.1b]

#### 20. MONITORING/RECORDKEEPING REQUIREMENTS:

# A. Facility-Wide Requirements

- 1) Opacity
  - a) The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:
    - (1) The date and time the visible emissions observation or Method 9 opacity reading was taken;
    - (2) The name of the observer;
    - (3) Whether or not visible emissions were present;
    - (4) If visible emissions are present and the controls and facility processes are operating in a mode other than their normal operating conditions, such as startup or shutdown, a description of the operating conditions at the time that the opacity is observed;
    - (5) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions;
    - (6) If applicable, a description of any corrective action(s) taken, including the date of such action(s); and
    - (7) Any other related information.

[County Rule 300] [County Rule 210 § 302.1]

b) The Permittee shall weekly conduct a facility walk-through and observe visible emissions from any device capable of emitting any air contaminant other than uncombined water.

[County Rules 300][County Rule 210 §302.1c]

c) If visible emissions, other than uncombined water, are observed being discharged into the ambient air, the Permittee shall monitor for compliance with the opacity standards specified in this permit by having a certified visible emissions evaluator determine the opacity of the visible emissions being discharged into the ambient air using the techniques specified in EPA Reference Method 9.

If the Permittee has not received either a compliance status notification or notice of violation regarding an opacity standard in the 12 months preceding the observation of visible emissions, the initial Method 9 opacity reading shall be taken within three days of observing visible emissions. If the Permittee has received either a compliance status notification or notice of violation regarding an opacity standard in the 12 months preceding the observation of emissions, the initial Method 9 opacity reading shall be taken within one day of observing visible emissions. If the emitting equipment is not operating on the day that the initial Method 9 opacity reading is required to be taken, then the initial Method 9 opacity reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions

is corrected before the initial Method 9 opacity reading is required to be performed, and there are no visible emissions (excluding uncombined water) observed from the previously emitting equipment while the equipment is in normal operation, the Permittee shall not be required to conduct the Method 9 opacity readings.

Follow-up Method 9 opacity readings shall be performed by a certified visible emissions evaluator while the emitting equipment in its standard mode of operation in accordance with the following schedule:

#### (1) Daily

- (a) Except as provided in paragraph 3 of this Permit Condition, a Method 9 opacity reading shall be conducted each day that the emitting equipment is operating until a minimum of 14 daily Method 9 readings have occurred.
- (b) If the Method 9 opacity readings required by this Permit Condition are less than 20% for 14 consecutive days, the frequency of Method 9 opacity readings may be decreased to weekly, in accordance with paragraph 2 of this Permit Condition.

# (2) Weekly:

- (a) If the permittee has obtained 14 consecutive daily Method 9 readings which do not exceed 20% opacity, the frequency of Method 9 readings may be decreased to once per week for any week in which the equipment is operated.
- (b) If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 opacity readings shall revert to daily, in accordance with paragraph 1 of this Permit Condition.
- (c) If the opacity measured during the required weekly Method 9 readings never exceeds 20%, the Permittee shall continue to obtain weekly opacity readings until the requirements of paragraph 3 of this Permit Condition are met.
- (3) Cease Follow-up Method 9 Opacity Monitoring:
  Regardless of the applicable monitoring schedule, follow-up
  Method 9 opacity readings may cease if the emitting equipment,
  while in its standard mode of operation, has no visible emissions,
  other than uncombined water, during every observation taken
  during a Method 9 procedure.

[County Rule 210 §302.1c]

#### d) Opacity Readings

(1) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.

[40 CFR 60.11.b] [County Rule 300 §501]

(2) Opacity of visible emissions from intermittent sources as defined by County Rule 300§201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method

9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300 § 502] [locally enforceable only]

#### 2) Odor Log

The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[County Rule 210 §302.1.c.(2)] [locally enforceable only]

#### B. Monitoring/Recordkeeping for Emission Limit from Permit Condition 18.B.1)

1) The Permittee shall monitor for compliance with the emission limits of Permit Condition 18.B.1) by calculating on a monthly basis the monthly and 12 month rolling total VOC emissions from the Fiberboard Saturation Process, Cure Plant, and Hot Oil Heater. The 12 month rolling VOC emissions total shall be calculated by summing the total emissions for the most recent complete 12 calendar months. The calculations shall be made no later than the end of the following month. VOC emissions from the fiberboard saturation process shall be based on the board production rate and emission factor of 240 pounds per 1000 cubic feet of board manufactured.

[County Rule 210 302.1c(2)]

# C. Monitoring/Recordkeeping for Cure Plant

The Permittee shall label all containers for coatings subject to County Rule 335 or Permit Condition 19.B.1) with a statement of the manufacturer's recommendation regarding thinning of the coatings. Data contained on this label may be quantified with either English or metric units, and this requirement shall not apply to the thinning of the coatings with water. All recommendations shall specify that the coating is to be employed without thinning or diluting under normal environmental and application conditions, unless the recommended thinning for normal environmental and application conditions does not cause the coatings to exceed its applicable standard. Architectural coatings subject to the Federal Insecticide, Fungicide and Rodenticide Act shall not be subject to this labeling requirement.

[County Rule 335 § 401] [SIP Rule 335 § 401]

2) The Permittee shall label all containers for coatings subject to County Rule 335 with the date of manufacture of the contents or a code indicating the date of manufacture. Should the Permittee manufacture such coatings, an explanation of each code applied to these containers shall be filed with the Control Officer.

[County Rule 335 § 402] [SIP Rule 335 § 402]

The Permittee shall keep a material list of all coatings used. The material list shall contain name of each coating, short description of the material, pounds of VOCs per gallon coating, excluding water and colorant added to tint bases and amount used. If the coating is exempt from the volatile organic compounds content requirements, the justification for the determination shall be documented and kept on file.

[County Rule 210 §302.1.c]

# D. <u>Monitoring/Recordkeeping for Fugitive Dust Sources</u>

1) The Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310§502][County SIP Rule 310§502]

2) Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310§503][County SIP Rule 310§503]

- 3) The following test methods shall be used as appropriate.
  - a) Opacity observations
    - (1) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with Appendix C, Section 3 (Visual Determination Of Opacity Of Emissions From Sources For Time-Averaged Regulations) of the County Rules, except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.

[County Rule 310 §501.1(a), Appendix C Section 3] [County SIP Rule 310 §501.1(a), Appendix C Section 3]

(2) Unpaved Haul/Access Road: Opacity observations of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for Unpaved Roads and Unpaved Parking Lots) of the County Rules.

[County Rule 310 §501.1(c), Appendix C Section 2.1] [County SIP Rule 310 §501.1(c), Appendix C Section 2.1]

(3) Unpaved Parking Lot: Opacity observations of any unpaved parking lot shall be conducted in accordance with Appendix C, Section 2.1 (Test Methods for Stabilization-For Unpaved Roads and Unpaved Parking Lots) of the County Rules

[County Rule 310 §501.1(b), Appendix C Section 2.1] [County SIP Rule 310 §501.1(b), Appendix C Section 2.1]

#### b) Stabilization Observations

(1) Unpaved Parking Lot: Stabilization observations for unpaved parking lots shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for Unpaved Roads and Unpaved Parking Lots) of the County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits, established in County Rule 310, determined by any of the applicable test methods constitutes a violation of the County Rules.

[County Rule 310 §501.2(a), Appendix C Section 2.1] [County SIP Rule 310 §501.2(a), Appendix C Section 2.1]

(2) Unpaved Haul/Access Road: Stabilization observations for unpaved haul/access roads (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots) of the County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits, established in County Rule 310, determined by any of the applicable test methods constitutes a violation of the County Rules.

[County Rule 310 §501.2(b), Appendix C Section 2.1] [County SIP Rule 310 §501.2(b), Appendix C Section 2.1]

- (3) Open Area and Vacant Lot or Disturbed Surface Area: Stabilization observations for an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall be conducted in accordance with at least one of the techniques described in 3)b)(3)(a) through 3)b)(3)(g) below, as applicable. The owner and/or operator of such inactive disturbed surface area shall be considered in violation of County Rule 310 if such inactive disturbed surface area is not maintained in a manner that meets at least 1 of the standards described in subsection 302.3 of County Rule 310, as applicable.
  - (a) Appendix C, Section 2.3 (Test Methods For Stabilization-Visible Crust Determination) (The Drop Ball/Steel Ball Test) of the County Rules for a visible crust; or
  - (b) Appendix C, Section 2.4 (Test Methods For Stabilization-Determination Of Threshold Friction Velocity (TFV)) (Sieving Field Procedure) of the County Rules for threshold friction velocity (TFV) corrected for nonerodible elements of 100 cm/second or higher; or

- (c) Appendix C, Section 2.5 (Test Methods For Stabilization-Determination Of Flat Vegetative Cover) of the County Rules for flat vegetation cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or
- (d) Appendix C, Section 2.6 (Test Methods For Stabilization-Determination Of Standing Vegetative Cover) of the County Rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or
- (e) Appendix C, Section 2.6 (Test Methods For Stabilization-Determination Of Standing Vegetative Cover) of the County Rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- (f) Appendix C, Section 2.7 (Test Methods For Stabilization-Rock Test Method) of the County Rules for a percent cover that is equal to or greater than 10%, for non-erodible elements; or
- (g) An alternative test method approved in writing by the Control Officer and the Administrator of the EPA.

[County Rule 310§501.2(c), Appendix C Section 2.3-2.7] [County Rule 310§501.2(c), Appendix C Section 2.3-2.7]

## E. Monitoring/Recordkeeping for Saturator Unit Production Limit

The Permittee shall maintain records of the monthly Board production rate of the Saturator Unit. The Permittee shall monitor for compliance with the monthly and 12 month rolling production limit of these Permit Conditions by monthly calculating and recording the monthly and the rolling 12 month production total. The 12 month rolling production total shall be calculated by summing the total production for the most recent complete 12 calendar months. The calculations shall be made no later than the end of the following month.

[County Rule 210 302.1c(2)]

#### F. Monitoring/Recordkeeping for Smoke Point Limitation for Heated Asphaltic Oil

The Permittee shall keep and maintain on file, a copy of the most recent asphalt supplier's certificate stating the smoke point temperature for the asphalt. In

addition, the Permittee shall maintain an operating log recording the maximum heated asphaltic oil temperature for each day of operation.

[County Rule 210 §302.1c]

#### 21. REPORTING REQUIREMENTS

The Permittee shall file semiannual monitoring reports with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6 month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed by the end of the month following the reporting period. Each report shall cover all instances of deviations from these permit conditions during the reporting period, the cause of the deviations if any were present, and any applicable corrective actions taken. The monitoring report shall also contain the following information at a minimum:

[County Rule 210 §302.1 e (1)]

# A. <u>Facility-Wide Requirements</u>

#### 1) Visible Emissions

The Permittee shall include the following in each semi-annual Compliance Report:

- a) Dates on which visible emissions observations were taken;
- b) Name of the observer;
- c) Whether or not visible emissions were present;
- d) The opacity of visible emissions determined by a Method 9 opacity reading, if applicable;
- e) A description of any corrective actions taken, including the date such action was taken:
- f) The name of individual certified as a visible emissions evaluator, the date of last certification, and company/agency providing the certification; and
- g) Any other related information.

[County Rules 210 §302.1e]

#### 2) Odor Log

The Permittee shall include a copy of the portion of the odor log which covers the applicable 6 month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

[County Rule 210 §302.1.e.(1)] [locally enforceable only]

#### B. Reporting Requirements for Emission Limit from Permit Condition 18.B.1)

The Permittee shall include the results of the monthly and the rolling 12-month VOC emissions rate calculations for each month in the six-months reporting period applicable to the emission limit from Permit Condition 18.B.1).

[County Rule 210 302.1.e.(1)]

#### C. Reporting Requirements for Cure Plant

The Permittee shall include the following in the semiannual compliance report:

- 1) A material list showing VOC content in lb/gallon of each coating subject to County Rule 335 and Permit Condition 19.B.1) of this Permit used during the reporting period.
- 2) A list of the coatings which are exempt from the volatile organic compounds content requirements and a reason for the exemption.

[County Rule 210 §302.1e]

#### D. Reporting Requirements for the Fugitive Dust Sources

Any deviation from the approved dust control plan, reason for that deviation and any corrective actions taken.

[County Rule 210 §302.1e(1)]

## E. Reporting Requirements for Saturator Unit Production Limit

The Permittee shall include the results of the monthly and the rolling 12-month Board production rate calculations for each month in the six-months reporting period applicable to the saturator unit production limit.

[County Rule 210 302.1.e.(1)]

#### F. Reporting Requirements for Smoke Point Limitation for Heated Asphaltic Oil

The Permittee shall include any exceedances of the smoke point temperature for the heated asphaltic oil.

[County Rule 210 302.1.e.(1)]

### 22. OTHER REQUIREMENTS

#### A. Dust Control Plan Required

1) The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operations. The Dust Control Plan shall describe all control measures to be implemented before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. The Plan shall include at least all the information contained in County Rule 310 §304. At least one primary control measure and one contingency control measure must be identified from Table 1 of County Rule 310.

[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)] [County SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

2) Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of County Rule 310, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §§303.1 and 306] [County SIP Rule 310 §§303.1 and 306]

If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from Section 301 and 302 of County Rule 310 and this permit, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305] [County SIP Rule 310 §305]

4) If any changes to a Dust Control Plan, associated with a Title V Permit, are necessary as a result of the most recent revisions of County Rule 310, then the Permittee shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures describe in County Rule 210, no later than 6 months after the effective date of the most recent revisions to County Rule 310.

[County Rule 310 §402.2] [County SIP Rule 310 §402.2]

#### RACT REQUIREMENTS FOR THE FIBERBOARD SATURATION PROCESS 23.

#### **Definitions** A.

Emissions Control System (ECS) A system for reducing emissions of organic compounds, consisting of both emissions collection and processing devices which are approved in writing by the Control Officer and are designed and operated in accordance with good engineering practice.

Saturator Unit - 3,000 gallon tank 48 foot in length. The tank is filled with asphalt and mineral spirits blend and is used for saturating fiberboards.

Fiberboard Saturation Process – Includes the Saturator Unit, Asphalt Storage Tank, Mineral Spirits Storage Tanks, and Asphalt/Mineral Spirits Blend Tanks

#### B. Operational Limitations/Standards

The Permittee shall install, operate, and maintain an Emissions Control System 1) (ECS) on the Saturator Unit.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

2) The Permittee shall vent the exhaust gases from the Saturator Unit to the ECS without bypass.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

- 3) The ECS shall achieve at least 85% by weight overall reduction of VOC emissions from the Saturator Unit. The capture efficiency shall be at least 90% by weight. The control efficiency of the ECS shall be at least 95% by weight. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]
- 4) The Permittee shall provide, implement, and maintain an O&M Plan for the ECS and for any monitoring devices that are used pursuant to County Rule 210§302.1(h)(g), SIP Rule 220§302.2, and this permit.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

5) The Permittee shall submit to the Control Officer for approval the O&M Plans of the ECS and each monitoring device that is used pursuant to County Rule 210§302.1(h)(g), SIP Rule 220§302.2, and this permit.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

6) The Permittee shall comply with all O&M Plans that the Permittee has submitted for approval but which have not yet been approved, unless notified otherwise by the Control Officer in writing. The O&M Plan shall contain, at a minimum, key operating limits and maintenance procedures acceptable to the Control Officer.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

- 7) The following conditions apply if a Thermal Oxidizer is the ECS:
  - a) The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established during the performance testing conducted pursuant to Permit Condition 24.F. Prior to the performance test, the average combustion temperature in any 3-hour period must not fall below the temperature limit in the most recently submitted O&M plan.
  - b) During the performance test required by these permit conditions, the Permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The Permittee shall monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.
  - c) The Permittee shall use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. If the perfomance test demonstrated at least 95% destruction efficiency for the thermal oxidizer, this average combustion temperature shall be the minimum combustion temperature limit for the thermal oxidizer as required in Permit Condition 24.B.7)a).

    [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]
- 8) If the ECS is found to be operating outside of the operating limits specified in this Permit or the most recently submitted O&M Plan, the Permittee shall investigate and take corrective action if necessary to bring the ECS back into proper operation.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

- 9) The Permittee shall not use the Asphalt/Mineral Spirits Blend Tanks unless they are fitted with a cover or other device provided for the tanks which prevents VOC evaporation. The cover or device shall be closed or in place on the tank at all times except during loading or unloading of the tank.

  [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]
- 10) All storage of VOC-containing materials subject to evaporation, including the storage of waste solvent and waste solvent residues, shall at all times be in closed containers except when contents are added or removed.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

11) Containers shall be legibly labeled with their contents.

#### C. Monitoring/Recordkeeping

- 1) If a Thermal Oxidizer will be utilized as the ECS, the Permittee shall install, maintain, and operate, in accordance with the manufacturer's recommendations, a monitoring device that continuously indicates and records the combustion temperature of the Thermal Oxidizer. The monitoring device must meet the following requirements:
  - a) The combustion temperature monitoring device must complete a minimum of one cycle of operation for each successive 15-minute period.
     A minimum of four equally spaced successive cycles of combustion temperature monitoring device operation in 1 hour are required.
  - b) Determine the average of all recorded readings for each successive 3-hour period of the thermal oxidizer operation.
  - c) The Permittee shall record the results of each inspection, calibration, and validation check of the combustion temperature monitoring device.
  - d) The Permittee shall maintain the combustion temperature monitoring device at all times and have available necessary parts for routine repairs of the combustion temperature monitoring equipment.
  - e) The Permittee shall operate the combustion temperature monitoring device and collect thermal oxidizer temperature data at all times that a fiberboard saturation process is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities(including, if applicable, calibration checks and required zero and span adjustments).
  - f) The Permittee shall not use temperature monitoring data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. The Permittee shall use all the data collected during all other periods in calculating the data averages for determining compliance with the thermal oxidizer temperature limits.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

2) The Permittee shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the differential pressure across the natural draft openings or across the inlet and outlet openings to the dip tank.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

3) The Permittee provide, properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if the ECS is functioning properly and is properly maintained.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

4) The Permittee shall maintain monthly records of the quantity of mineral

spirits, asphalt, and all other VOC containing materials that were purchased, used, and disposed of in the fiberboard saturation process. The Permittee shall maintain a twelve (12) month rolling total of the quantities of mineral spirits, asphalt, and all other VOC containing materials that were purchased, used, and disposed of in the fiberboard saturation process.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

5) The Permittee shall keep and maintain on file, a copy of the MSDS for the Mineral Spirits, asphalt and all other VOC containing materials used in the fiberboard saturation process.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

6) Records shall be kept complete and up-to-date, in a consistent and legible format.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

#### D. Periodic Monitoring/Recordkeeping for Saturator Unit ECS

If the ECS is found to be operating outside of the operating limits specified in either these Permit Conditions or the O&M Plan, the Permittee shall record the following:

- a) The date and time when the ECS was found to be operating outside of its operating limits and the date and time that it returned to operating within its limits.
- b) The results of the investigation into the cause of the excursion outside of the operating limits
- c) A description of any corrective actions taken to return the ECS to normal operation. If the ECS returned to normal operation without any actions by the Permittee, that fact shall also be recorded.

[County Rule 210 §302.1c]

#### E. Reporting Requirements

- 1) The Permittee shall include the following information in the semiannual monitoring report:
  - a) Any dates when the required monitoring was not performed. If all monitoring was performed during the reporting, a statement to that effect will satisfy this requirement.
  - b) Any dates when the ECS was bypassed. If the ECS was not bypassed during the reporting period, a statement to that effect will satisfy this requirement.
  - c) If any of the operating parameters are found to be operating outside of its operating limits, the report shall include the following information
    - (1) The equipment identification along with the date and time that the excursion was discovered.
    - (2) The values of the daily readings during the excursion.
    - (3) The date and time that the readings were returned to normal.
    - (4) The cause of the excursion and what corrective actions were taken to bring the readings back to normal. If the reading returned to

normal without corrective actions, a statement to that effect should be included.

If the parameters were always found to be operating within their limits, a statement to that effect will satisfy this requirement.

[County Rule 210 §302.1e]

2) The Permittee shall submit the following in the semiannual monitoring report:

The Permittee shall submit the results of the monthly and 12 month rolling calculations of mineral spirits, asphalt, and all other VOC containing materials purchased, used, and disposed in the fiberboard saturation process for each month in the six-months reporting period,

[County Rule 210 §302.1e]

3) If the Permittee uses an ECS other than a thermal oxidizer, the Permittee shall submit an application for a permit revision prior to its installation in order to include operating, monitoring, performance testing, and recordkeeping requirements appropriate to the ECS used. If the Permittee uses a thermal oxidizer, the Permittee shall submit a written notification by hand delivery or by certified mail to the Administrator of the EPA and to the Control Officer a minimum of 7 working days prior to commencing construction of the ECS.

[County Rule 210 §302.1e]

#### F. <u>Testing</u>

1) The Permittee shall conduct performance testing on the ECS that will be installed on the Saturator Unit.

[County Rule 200 §309]

2) The Permittee shall use EPA test methods 25A, 40 CFR 60 Appendix A to demonstrate the VOC destruction or control efficiency and VOC emission rate of the ECS. The Capture efficiency of the ECS shall be verified using both EPA Method 204 and EPA Guidance Document "Guidelines for Determining Capture Efficiency", January 9, 1995 or an alternative method approved by the Administrator and the Control Officer.

[County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]

3) If a Thermal Oxidizer is the ECS, the Permittee shall use EPA test methods 7E and 10 to demonstrate the NOx and CO emission rates of the Thermal Oxidizer.

[County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]

4) The testing shall be conducted by March 24, 2005.

[County Rule 270 §401] [SIP Rule 27A]

5) Performance tests shall be conducted under such conditions as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests.

Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[County Rule 270 §403]

6) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the performance test.

[County Rule 270 §301.1] [County Rule 280 §301.5]

7) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the performance test so that the Department may have a representative attend.

[County Rule 270 §404]

8) The Permittee shall submit a report to the Department within 30 days after completion of the performance test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.

[County Rule 270 §§301.1 & 401]

#### G. Compliance Schedule

- 1) Schedule of Compliance
  - a) In order to achieve compliance with County Rule 210§302.1(h)(6), SIP Rule 220§302.2, and the requirements of these Permit Conditions (RACT requirements for the 3,000 gallon Saturator Unit), the Permittee shall install an ECS in accordance with the following schedule:
    - (1) By July 16, 2004 the Permittee shall complete system design/engineering.
    - (2) By September 5, 2004, the Permittee shall identify bidders, prepare request for proposal, and solicit bidders.
    - (3) By October 3, 2004, the Permitee shall review bids, select firm, and award contract.
    - (4) By March 6, 2005 the Permittee shall complete equipment fabrication/delivery.
    - (5) By April 15, 2005, the Permittee shall identify installation contractors and prepare request for proposal.
    - (6) By May 13, 2005, the Permittee shall select installation contractor and finalize contract.
    - (7) By June 22, 2005, the Permittee shall complete installation of control equipment that will achieve compliance with RACT requirements.

- (8) By June 22, 2005, the Permittee shall submit an operations/maintenance (O&M) plan.
- (9) By July 24, 2005, complete startup and debugging period
- (10) By August 24, 2005, the Permittee shall complete a stack test to demonstrate compliance with RACT requirements.
- (11) By September 2, 2005, the Permittee shall update the O&M plan if necessary.
- b) On a quarterly basis the Permittee shall submit a certified progress report to the Control Officer, Attn: Large Source Compliance Supervisor. The report shall contain, at a minimum the following information:
  - (1) Dates when the milestones specified in Permit Condtion 23.G.1) Schedule of Compliance were achieved; and
  - (2) An explanation of why any dates specified in Permit Condition 23.G.1) Schedule of Compliance were not or will not be met, and any preventive or corrective measures adopted.

[County Rule 210§305.1g. (3),(4)]

# Appendix A Equipment List W.R. Meadows of Arizona Inc. V98004

Name/Type		
FIBERBOARD SATURATION PROCESS		
One (1) 3,000 gallon Dip Tank (Saturator Unit)		
One (1) 10,000 gallon Asphalt Storage Tank		
Two (2)10,000 gallon Mineral Spirits Storage Tanks		
Two (2) 10,000 gallon Asphalt/Mineral Spirits Blend Tanks		
HOT OIL HEATER		
2.12 MMBTU/HR Hot Oil Heater Installed 1997		
CURE PLANT		
Two (2) 500 gallon Uncovered Inversion Storage Tanks		
Two (2) 2,500 gallon Covered Mixing Tanks		
10,000 gallon Heated Petroleum Wax Storage		
10,000 gallon Aromatic Solvent Storage Tank		
3,000 gallon Hot Water Storage Tank		
Two (2) 10,000 gallon Mineral Spirits Storage Tanks		
8,000 gallon Water Based Product Storage		
5.1 Acre FIBERBOARD DRYING YARD		

#### Technical Support Document (TSD) W.R. Meadows of Arizona Inc. Permit Number V98-004

#### I. COMPANY DESCRIPTION

The W.R. Meadows of Arizona, Inc. facility located in Goodyear, Arizona began construction in 1981. The original operating permit number is 8602358. A Title V application was submitted on October 23, 1998. W.R. Meadows manufactures products utilized by commercial highway and building contractors. Products manufactured include fiber concrete expansion joints, concrete curing compounds, and form release agents. Products warehoused and sold (but not manufactured) include vaporproofing/waterproofing membranes, epoxies, joint sealing materials, and primers. The facility occupies 10.6 acres and employs fifteen people. Major facility operations include the Fiber Saturation Process, Fiberboard Drying Yard, and Cure Plant.

#### **Company Information**

Facility Name: W.R. Meadows of Arizona Inc.

Facility Mailing Address: W.R. Meadows of Arizona, Inc.

PO Box 154

Goodyear, AZ 85338

Contact Mailing Address: Mr. David Carey

W.R. Meadows Inc.

PO Box 338

Hampshire, IL 60140-0338

Facility Address: W.R. Meadows of Arizona Inc.

2636 S. Sarival Ave. Goodyear, AZ 85338

#### II. PROCESS DESCRIPTION

#### A. Fiberboard Saturation Process

The fiberboard saturation process consists of:

- 1) One (1) 3,000 gallon Dip Tank (Saturator Unit)
- 2) One (1) 10,000 gallon Asphalt Storage Tank
- 3) Two (2) 10,000 gallon Mineral Spirits Storage Tanks
- 4) Two (2) 10,000 gallon tanks for storage/manufacture of Asphalt/Mineral Spirits Blend.

The Fiberboard Saturation Process is used in manufacturing of fiber concrete expansion joints. These joints are composed of cellular fibers that are securely bound together and are uniformly saturated with asphalt to water proof the product, thus ensuring longevity of the product. Typical uses of this fiber expansion joint include use on highways, streets, airport runways, sidewalks, driveways, flatwork, and numerous other commercial and industrial applications that are subject to both pedestrian and vehicular traffic.

This process begins when a volume of Mineral Spirits is pumped from its storage tank into one of the 10,000 gallon blend tanks. Once the desired volume of Mineral Spirits has been added to the blend tank, hot asphalt (at a temperature between 280 and 320°F) is pumped into the blend tank, and the resulting mixture is agitated to create a homogeneous blend of the two materials. The final mixture has a temperature within the range of 100 to 140°F, and is stored for use in the Saturator Unit.

In order to produce the Fiber Expansion Joint, fiberboards made of sugar cane stalks are manually placed onto a conveyor system and drawn through the dipping tank (Saturator Unit) containing the homogeneous blend of Asphalt and Mineral Spirits. Each board is drawn through the 3,000 gallon 48 foot long Saturator Unit in approximately 10 to 15 seconds, and is then manually removed from the Saturator Unit and stacked onto pallets consisting of 40 1-inch fiberboards or 80 ½-inch fiberboards. These saturated fiberboards are then moved to a 5.1-acre plot to begin drying. The point after which the boards are removed from the Saturator Unit is not considered to be part of the Saturator Unit for purposes of the requirement in the permit to control the Saturator Unit.

#### B. 2.12 MMBtu/hr Hot Oil Heater

The hot oil heater is used to convert the semi-solid asphalt into a less viscous liquid state in order to aid in the transfer of the asphalt and its mixing with the mineral spirits. Using indirect heat (meaning that the asphalt is not exposed to an open flame) the asphalt is heated to a preset temperature somewhere within the range of 280 to 320°F. A temperature sensor will maintain the asphalt at this preset temperature which will be limited to the temperature at which the asphalt begins to evaporate, giving off a blue colored smoke (or smoke point temperature, which should be provided on the asphalt supplier's certificate).

#### C. Cure Plant

The Cure Plant consists of:

- 1) Two (2) 2,500 gallon Covered Mix Tanks
- 2) Two (2) 500 gallon Uncovered Inversion Storage Tanks.
- 3) One (1) 10,000 gallon Heated Petroleum Wax Storage Tank
- 4) One (1) 10,000 gallon Aromatic Solvent Storage Tank
- 5) Two (2) 10,000 gallon Mineral Spirits Storage Tanks
- 6) One (1) 8,000 gallon Water Based Products Storage Tank

In the Cure Plant, raw materials are blended together to manufacture both solvent

based and water based W. R. Meadows products (such as concrete sealants, concrete curing compounds, and form release agents). Raw materials typically consist of Petroleum Wax, #2 Fuel Oil, Aromatic Solvents, Mineral Spirits, Hydrocarbon Resin-Cyclopentadien Type, Ammonium Hydroxide, Morpholine, Titanium Dioxide, Acrylic Resin, 100 Oil, Kaolin Clay, Stearic Acid, Tall Oil, Sodium Silicate, Calcium Chloride and Water.

All mixing tanks in this portion of the facility are covered so as to reduce the amount of VOCs lost due to evaporative losses, however, the mixing tanks are covered with hatchways for the manual addition of some of the raw materials. The larger volume raw materials (consisting of mineral spirits, aromatic solvents, water, etc...) are added to the tanks by means of submerged fill pipes. Once the ingredients have been added to the mixing tanks, the solutions are agitated for a specific amount of time, and then stored until they are ready for packaging and sale. Because W. R. Meadows employs such an enclosed process, the amount of emissions from this portion of the facility are kept to a minimum, and are generally considered to be much less than 1 ton per year on an annual basis.

#### D. 5.1 Acre Drying Area

The 5.1 acre drying area is where the pallets of boards processed in the fiber board saturator unit are placed so that the asphalt/mineral spirits mixture might "wick" into the boards. Wicking, or the absorption of the asphalt into the fiber boards, takes approximately four to six weeks to accomplish, with approximately 100 pounds of VOC materials (typically the lighter mineral spirits) evaporating from each pallet of boards. The final product is a pallet of fiber boards that have been completely impregnated by asphalt, thereby creating the water proof and elastic concrete sealing joint that is capable of meeting ASTM specifications.

#### III. EMISSION RATES/CALCULATIONS

#### A. Fiberboad Saturation Process

VOC Emissions were calculated based on a Board Production Rate limit of 790,000 ft<sup>3</sup>/yr on the Saturator Unit. The facility agreed to a Production Rate limit of 66,000 ft<sup>3</sup>/month. 66,000 ft<sup>3</sup>/month x 12 months/yr = 792,000 ft<sup>3</sup>/yr which is rounded to 790,000.

 $790,000 \text{ ft}^3 / \text{year x } 240 \text{ lb} / 1000 \text{ ft}^3 \text{ x } \text{ton} / 2000 \text{ lb} = 94.8 \text{ tons VOC per year}$ 

If the RACT controls at 85% that are to be added through a compliance plan are considered

$$VOC = (94.8 - 0.42) \times (0.15) + 0.42 = 14.6 \text{ tons per year}$$

The potential to emit (PTE) VOCs if no production limit and no effects of a control device are considered is calculated as follows:

The emissions are calculated based on a maximum process capacity of 3 pallets per hour. This is based on a maximum board residence time of 15 seconds. The equation assumes there are 80 boards to a pallet. The average volume of the boards is calculated from 1997 production data to give 130.4 ft<sup>3</sup>/pallet.

3 pallets per hour x 130.4 ft<sup>3</sup>/pallet x 8760 hrs/yr = 3,426,912 ft<sup>3</sup> per year.

 $3,426,912 \text{ ft}^3 / \text{year} \times 240 \text{ lb}/1000 \text{ ft}^3 \times \text{ton}/2000 \text{ lb} = 411 \text{ tons VOC per year}$ 

The emission factor 240 lb/1000 ft<sup>3</sup> was calculated based on testing done on an identical operation at Austell Georgia (March 18 – May 10, 1996). The test was performed over an 8 week period and involved a material balance where incoming materials were weighed and the pallets of manufactured boards were weighed. Unaccounted for material was assumed to be mineral spirits and was assumed to be emitted to the atmosphere during the saturation process.

#### B. Hot Oil Heater

#### **Potential Emissions**

Pollutant	*lb/MMBtu	Pounds per hour (lb/hr)	Tons per year (tpy)
CO	0.082353	0.175	0.765
NOx	0.098039	0.208	0.910
$PM_{10}$	0.007451	0.0158	0.0692
SO2	0.000588	0.25E-3	5.46E-3
VOC	0.005392	0.0114	0.0501

These emission factors are from AP-42 Chapter 1.4. Converted from lb/MMscf to lb/MMBtu by dividing by 1020 Based on 2.12 MMBtu/hr, natural gas fired only, and 8760 hrs/year operation

#### C. Cure Plant

VOC 98 lbs/yr, 0.05 TPY

Based on SCC emission factors to calculate breathing and working losses. To calculate PTE, the working losses are adjusted from 1996 to 1997 emissions and then doubled before being added to the breathing losses. The reason for low emissions from this part of the facility is the mixing tanks are covered, trapping emissions within the tank and products are packaged and not allowed to dry on site.

#### D. 5.1 Acre Drying Area.

An emission factor of 100 lbs/pallet was used. In order to come up with this factor, 174 pallets of saturated boards at WR Meadows of Arizona were weighed during the months of April and May 1996. The pallets were weighed immediately after saturation and once per week for a period of four weeks. To calculate Potential, this factor was multiplied by the maximum pallets per year that could be processed through the dip tank considering the production rate limit on the Saturator Unit.

**303 TPY** 

## E. <u>Asphalt/Mineral Spirits Blend Tanks, Mineral Spirits Storage Tanks in the</u> Fiberboard Saturation Process

Emissions from the Asphalt/Mineral Spirits Blend Tanks were estimated based on the TANKS 4.0 program which gives 0.12 tons per year total from both tanks. Assumed PTE is 0.21 tpy which is obtained by doubling the working losses and adding to the breathing losses. The emissions from the blend tanks are also included in the total emission rate for the Fiberboard Saturation Process. The emissions from the two (2) 10,000 gallons mineral spirits storage tanks are also estimated at 0.12 tons per year. Assumed their PTE is also 0.21 TPY. This gives 0.42 tpy total from all four tanks.

#### F. Summary of Facility Wide PTE Emission Rates

Pollutant	Tons Per Year
VOC	318**
СО	0.765
NOx	0.910
$SO_2$	5.46E-3
$PM_{10}$	0.0692

<sup>\*</sup> Takes into account the production limit and controls on the Saturator Unit.

#### IV. APPLICABLE REQUIREMENTS

#### A. County Rule 300-Opacity Limits (Permit Condition 18.A.1))

#### 1. Discussion

County Rule 300 restricts visible emissions from any source to 20% opacity other than emissions of uncombined water. County Rule 300 and the 20% opacity limitation of these permit conditions are locally enforceable only. SIP Rule 30 and the 40% opacity limitation of these permit conditions are federally enforceable.

#### 2. Monitoring for Compliance with Opacity Limits

Because a permit condition will keep the asphalt from being heated to a temperature exceeding its smoke point temperature (Permit Condition 19.F), the temperature beyond which a blue smoke would develop, no visible emissions are expected from this facility. The Permittee will monitor for compliance with the opacity requirements of this permit by performing a weekly walk around the outside of the facility, looking for visible emissions from any device capable of emitting any air contaminant other than uncombined water. This requirement is intended to regulate the opacity from sources that vent outdoors.

If emissions are observed, and the Permittee has not had an opacity violation in the 12 months preceding the observation, then the Permittee is required to obtain an EPA Method 9 reading by a certified reader within 3 days of the observation. Follow-up Method 9 readings by a certified VE reader shall be

<sup>\*\* 303</sup> TPY of the total is from the drying emissions

taken daily for the emitting equipment thereafter for the next 13 days that the emitting equipment is operated. The Method 9 readings shall be taken with the emitting equipment in operation. After the daily Method 9 readings for 14 days of operation have been obtained and the opacity readings have been less than 20%, the Permittee shall perform weekly Method 9 readings during each week that the emitting equipment is in operation. If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 readings shall revert back to daily. Follow-up Method 9 opacity readings may cease if the emitting equipment, while in its standard mode of operation, has no visible emissions during every observation taken during a Method 9 procedure.

If the Permittee has received a compliance status notification or notice of violation of an opacity standard in the 12 months preceding the visual observation, the initial Method 9 reading shall be taken within 1 day of the visual observance.

If no operation of the emitting equipment occurs on the day the initial Method 9 reading is required to be taken, then the initial certified Method 9 reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 reading is required, and no emissions are visible with the previously emitting equipment in operation, the Permittee shall not be required to conduct the Method 9 reading.

A certified Method 9 reading of greater than 20% opacity at any time constitutes a violation of the opacity limitations of the Permit, regardless of whether visible emissions have persisted for three subsequent days.

# B. <u>County Rule 210§302.1b – Emission Limit for Fiberboard Saturation Process, Cure Plant and Hot Oil Heater(Permit Condition 18.B.1)</u>)

#### 1. Discussion

VOC emission limits were placed on the above described operations. Prior to December 8, 1997, Maricopa County was designated as a moderate nonattainment area for ozone. The New Source Review (NSR)(County Rule 240) major source threshold was 100 TPY. At the time the facility was originally permitted, the VOC emissions from the above described operations were less than 100 TPY, and so the facility was not required to go through NSR. The annual emissions reports submitted by the facility have shown no exceedance of that threshold. To ensure that the 100 TPY threshold will not be exceeded in the future, limits must be in place. Once the required control device is installed and the compliance plan is met under Permit Condition 24, the potential to emit from the above described operations will be far below the 96 tons per year limitation. At the time, the permit may need to be revised to amend the 96 tpy limitation. The attainment designation changed in 1997 and so the NSR major source threshold changed to 50 TPY for VOCs. This means that WR Meadows is considered a major source of VOC emissions and will be subject to NSR if future modifications from that point exceed the significance threshold. The threshold change from 100 TPY to 50 TPY did not itself trigger

a requirement that the source go through NSR.

2. County Rule 210 §302.1c(2) - Monitoring for Compliance with VOC Emission Limits

County Rule 210 §302.1c(2) is cited as the basis for monitoring when the applicable requirement does not specify monitoring and the Department has to develop monitoring and recordkeeping.

The Permittee is required to monitor for compliance with the VOC emission limits by calculating and recording the monthly and rolling 12 month totals of VOCs each month. VOC emissions from the fiberboard saturation process should be calculated based on board production rate of the Saturator Unit and the emission factor of 240 lb/1000 ft<sup>3</sup>. The board production rate is limited to 66,000 ft<sup>3</sup>/month at the facility's request and 790,000 ft<sup>3</sup>/yr based on a 12 month rolling sum (**Permit Condition 19.E.**). 790,000 ft<sup>3</sup>/yr is the rate at which the emissions from the Fiberboard Saturation Process are 94.8 tons per year. The production rate limits by themselves should ensure that the 16000 lbs/month and 96 tons per year VOC limits are not exceeded. The potential to emit from the sum of the Cure Plant and the Hot Oil Heater is only 0.1 TPY

# C. County Rule 320 - Odors and Gaseous Air Contaminants (Permit Condition 18.A.2), 19.A.1), 19.A.2)

1. Discussion

County Rule 320 §300, 302, and 303, entitled "Standards", "Material Containment Required" and "Reasonable Stack Height Required", respectively, apply to this facility and have been incorporated into the permit conditions. Permit conditions based on County Rule 320 §300 are locally enforceable only.

3. Monitoring for Compliance with Rule 320 Limitations
To monitor for compliance with these requirements, the Permittee is required
(Permit Condition 20.A.2)) to maintain an odor complaint log containing a
description of the complaint, date, time and other information and submit a
copy of this log with the semi-annual monitoring report (Permit Condition
21.A.2)).

#### E. County Rule 335 – Architectural Coatings (**Permit Condition 19.C.**)

#### 1. Discussion - Standards

The facility is subject to the VOC limits of this rule due to their manufacture of concrete curing compounds in the Cure Plant. The limit for concrete curing compounds is 2.9 lbs/gal.

#### 2. Monitoring/Recordkeeping

County Rule 335 requires the Permittee to label all containers with the concrete curing compounds with a statement of the manufacturer's recommendation regarding thinning of the coatings. The Permittee shall also be required to label all containers for concrete curing compounds with the date of manufacture of the contents or a code indicating the date of manufacture. Since the Permittee manufactures these coatings, an explanation of each code applied to the containers shall be filed with the Control Officer.

The Permittee shall keep a material list of all coatings used pursuant to County Rule 335. The material list contains the name of the coating, short description of the material, pounds VOC per gallon coating, excluding water and colorant added to tint bases and amount used.

#### F. County Rule 310 – Fugitive Dust Sources

#### 1. Discussion

The facility has an unpaved dirt road, unpaved parking lot, and open areas These are routine dust generating operations that require a dust control plan to address the open area, vehicle use across open areas, unpaved haul/access road, unpaved parking lot, trackout, and cleanup of trackout. These operations must comply with Rule 310. The facility submitted their Dust Control Plan on September 23, 2003 and revised it on September 30, 2003. A letter was sent dated October 1, 2003 approving the revised Dust Control Plan. The permittee is subject to a 20% opacity (**Permit Condition 18.C.**) limit from these fugitive dust sources and all fugitive dust sources. The dirt road is subject to a 20% opacity and must either meet stabilization requirements or as an alternative, limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. (Permit Condition 19.C.1)b)). The unpaved parking lot must meet stabilization requirements. (Permit Condition 19.C.1)a)) The Open Area on which no activity is occurring is subject to stabilization requirements. (Permit Condition 19.C.1)c)). Work Practices for the unpaved haul/access road, trackout, and cleanup of trackout are specified in Permit Condition 19.C.4)). The Dust Control Plan specifies a primary control measure that must be implemented. A contingency control measure is also specified which must be implemented should the primary prove ineffective. The Permittee shall not allow or engage in the listed routine dust generating operations (bulk material transport....) without obtaining a revision to his permit (Permit Condition 19.C.5).

#### 2. Monitoring/Recordkeeping

To monitor for compliance with these requirements, the Permittee shall keep a daily written log recording the actual application of implementation of the control measures delineated in the approved Dust Control Plan. (**Permit Condition 20.D.1**))

Compliance with the Dust Control Plan is considered compliance with the stabilization requirements of the permit. Compliance with the DCP is considered compliance with the Rule 310 opacity requirements of the permit unless an exceedance is documented by the Control Officer who is a certified VE reader. If a violation is observed, the DCP shall be revised within 3 working days of Control Officer's written notice.

#### G. County Rule 210§302.1(h)(6), SIP Rule 220§302.2 (Permit Condition 23)

#### 1. Discussion

These portions of the rules require major sources to apply reasonably available control technology (RACT) if they are located in a nonattainment area for the pollutant for which they are major. WR Meadows is a major source of VOCs and is subject to this requirement. The facility is currently out of compliance with County Rule 210§302.1(h)(6) and SIP Rule 220§302.2. However, a compliance plan is included in the permit (Permit Conditions 23.G.) which specifies milestone dates leading up to full compliance with this requirement. The milestones dates in the draft permit were based on the assumption that the Title V Permit would be issued by January 1, 2004. Because the Permit was not issued by January 1, 2004, these dates were no longer realistic. These dates have been corrected (moved 5 months) at the facility's request. To meet RACT requirements, the facility proposes to install a thermal oxidizer with 85% overall control efficiency (90% capture efficiency and 95% control efficiency). They have the option to use another control device that meets the same efficiency requirements. Permit Conditions were included, which require an ECS is installed, that the exhaust gases from the Saturator Unit be vented to the ECS without bypass, and the above efficiencies be met. If a thermal oxidizer is the chosen ECS, the permit requires the thermal oxidizer average combustion temperature in any 3-hour period be at least the average combustion temperature measured during a performance test that demonstrates compliance. Until the performance test, the average combustion temperature must not fall below the temperature limit in the most recently submitted O&M plan. An O&M Plan must also be submitted and maintained for the ECS.

#### 2. Monitoring

To monitor for compliance with these requirements, the facility shall install a device to continuously monitor and record the combustion temperature of the Thermal Oxidizer. To facility shall also install a device to continuously monitor and record the differential pressure across the inlet and outlet openings to the Saturator Unit. The differential pressure is a way to find out the average facial velocity. The minimum average face velocity for one of five criteria to

be met to demonstrate a total enclosure is 3600 m/hr which corresponds to a pressure drop of 0.013 mmHg as found in EPA test method 204. Method 204 is for verification of a permanent or temporary total enclosure. If an ECS other than a Thermal Oxidizer is installed, the Permittee shall install the devices described in the facility's O&M Plan indicating temperature, pressures, rates of flow or other operating conditions to determine if the ECS is functioning properly and properly maintained. The Permittee shall submit an application for a permit revision prior to installation of an ECS other than a thermal oxidizer in order to include specific requirements appropriate to the ECS used.

Monitoring pursuant to County Rule 210 §302.1c (**Permit Condition 23.D.**) to show compliance with the RACT requirements include records of date and time when the control device exceeds its combustion temperature limit or other operating limit if not a thermal oxidizer, investigation into the cause of the excursion, description of corrective actions taken, and records of the control device returning to normal operation if no action was taken.

The facility shall also keep monthly and a 12 month rolling total of amounts of mineral spirits, asphalt, and all other VOC containing materials that were purchased, used and disposed in the fiberboard saturation process. MSDS sheets for these materials shall be kept and maintained on file.

#### 3. RACT Analysis

Saturator Unit and Fiberboard Drying Yard:

RACT is defined in County Rule 100 – General Provisions and Definitions. RACT for units at the facility with existing source performance standards like the Cure Plant would be its emission limitations under County Rule 335. Because there is no source specific standard under Regulation III for VOC emissions from the Saturator Unit and the Fiberboard Drying Yard, a case-by-case RACT determination was necessary for these units. RACT for these units must be the lowest emission limitation capable of being achieved by the application of control technology that is reasonably available considering technological and economic feasibility. "Such technology may previously have been applied to a similar, but not necessarily identical, source category". RACT for these units is "determined on a case-by-case basis, considering the technological feasibility and cost-effectiveness of the application of the control technology to the source category."

On August 25, 2003, a Case-by-Case RACT analysis was received from the facility. A revised RACT analysis was received September 26, 2003 after the facility was asked to quantify the cost effectiveness for a thermal oxidizer, which had been deemed as one of the technologically feasible options. The RACT submittal followed RACT studies submitted in 1997 for the Fiberboard Drying Yard and Saturation Unit. The earlier study found that RACT could not be applied to the emissions from the Fiberboard Drying Yard since the construction of a building and emissions control unit would be too expensive to be implemented. The Department concurred.

Some of the differences between the 1997 cost submittals and the September 26, 2003 submittal are: 1) the thermal oxidizer cost was quantified, 2) the costs were escalated for inflation, 3) the interest rate was changed to the present interest rate, and 4) the September 26, 2003 submittal's assumptions were based primarily on the OAQPS Control Cost Manual, including revised fuel and electricity costs based on current utility costs, design flows, and using the methodology in the OAQPS Cost Manual. A refrigerated condenser was also deemed technologically infeasible as a control device for the Fiberboard Drying Yard because it is recommended for controlling streams with high concentrations of VOC. Fuel costs for the burning of natural gas contributed greatly to the utilities cost in the September 26, 2003 analysis.

In the 2003 RACT submittal, the RACT analysis again showed it was both economically and technologically feasible to control the Saturator Unit and that 85% overall control could be achieved with either a thermal or catalytic oxidizer or a refrigerated condenser. The minimum cost effectiveness value was 2,026 \$/ton. RACT for the Fiberboard Drying Yard was again determined to be technologically feasible with a building and control device but was deemed too expensive (not economically feasible) for RACT. The minimum cost effectiveness value of 15,660 \$/ton is above 7-8,000 \$/ton and therefore not considered cost effective for RACT purposes. 15,660 \$/ton is the cost effectiveness value for a catalytic oxidizer using the discounted cash flow (present worth) basis. This method predicts 21,068 \$/ton using a thermal oxidizer. The annualized cost method results in cost effectiveness values of \$25,601/ton for thermal oxidation and \$18,714/ton for catalytic oxidation. No alternative strategies for lowering emissions such as reformulation, process changes, and facility redesign were deemed technologically feasible. The options considered would not allow the fiber expansion joint to meet ASTM D-1571.

To identify potential control alternatives, a review was conducted of the RACT/BACT/LAER Clearinghouse and California Air Resources Board (CARB) BACT Clearinghouse. The results of the review and followup calls to the permitting agencies revealed that none of the found processes were required to control VOC emissions resulting from ambient air curing processes. Discussions with regulators in California including one at South Coast AQMD did not reveal any similar sources required to control ambient curing emissions. SCAQMD did not know of VOC control from any ambient curing process.

Koppers Industries sells an asphalt-coated felt-based sheet. The entire process is within the manufacturing building which has an exhaust system with fume recovery device to control VOC emissions. WR Meadows explained that there is a big difference between a thin, pliable felt-based sheet and thick, rigid fiberboard so that a 4 week ambient air curing process is not needed at Koppers Industries.

WR Meadows owns virtually identical facilities located in Illinois and Georgia. Currently, neither facility is required to control emissions from the curing

process. Right Pointe, Inc. operates a virtually identical process in Illinois but employs no emission controls. Celotex, once a primary supplier of impregnated fiberboard to Meadows, no longer operates due to a catastrophic fire. They did not have requirements for controlling the curing emissions. The Louisiana Department of Environmental Quality was contacted and they were unable to locate any permits for the curing emissions from the Celotex Plant.

The facility's attempts for product reformulation was ruled out as an option. WR Meadows researched using an aqueous asphalt emulsion instead of mineral spirits. This caused incomplete saturation, poor curing, and fiberboards sticking together. They also tried the use of other solvents that would decrease the dry time. The new solvents were much more flammable and had HAPs and therefore were ruled out as options. Meadows evaluated the use of supercritical CO<sub>2</sub> as an asphalt carrier. Cost issues as well as asphalt solubility precluded this option from being utilized.

The two primary facility redesign options explored are a closed system option or a forced curing operation. The closed system resulted in oversaturation. The forced curing option prevented full asphalt penetration of the fiberboard.

WR Meadows also describes in January 3, 2001 letter to Maricopa County, how their tests to change the line speeds, decrease the blend temperature and unbundling the pallets achieved similar results of incomplete penetration. Attempts to compress the boards were also unsuccessful.

WR Meadows researched the effect of reducing mineral spirits in the asphalt mixture. This also resulted in the asphalt not penetrating through the fiberboard. This creates an "oreo cookie" effect with the black asphalt on both surfaces and the untreated lighter fiber in the center. The "oreo cookie" board fails to meet ASTM criteria and cannot be used for asphalt joint material in construction projects. Therefore this option was also ruled out as a RACT option.

Asphal/Mineral Spirits Blend Tanks (2), Mineral Spirits Storage Tanks (2):

These tanks are already equipped with covers. Due to the low emissions, low vapor pressure and small size of these tanks, the only operational requirements being established for this equipment are: 1) the blend tanks are to be equipped with a cover or other device which prevents VOC evaporation and these will be closed or in place except when unloading or loading material, and 2) The storage tanks shall be kept closed except when adding or removing material. All Tanks shall be legibly labeled with their contents.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

## H. County Rule 240 Applicability Discussion related to the Emissions from the 5.1 Acre Drying Area

1. Discussion

The W.R. Meadows facility was originally permitted at its current location in 1981. Because its VOC emissions were less than the 100 TPY major source threshold applicable to non-attainment areas, the facility was not required to undergo major source NSR. Emissions of VOC from the drying of the fiberboards were classified at that time as fugitive emissions. These emissions were not included in determining whether the source was major because the facility was not one of the categorical sources listed in the definition of "major source." *See* Regulation 1, Rule 100 § 200.60. Because the major source threshold for VOC emissions has since been decreased to 50 TPY, the W.R. Meadows facility is now classified as a major source.

"Fugitive emissions" are defined by Maricopa County as "[a]ny emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." Rule 100 § 200.55. EPA's definition of "fugitive emissions" is the same as that of Maricopa County. 40 C.F.R. §§ 51.165(a)(1), 52.21(b)(20). Whether emissions are fugitive is a determination that can change due to advances in control methods, changes in industry practice, and other reasons. Therefore, it is appropriate to consider the basis for the initial classification of the drying emissions from the saturated fiberboards and whether that classification should change.

The principal EPA guidance available at the time the W.R. Meadows facility was originally permitted consists of comments by EPA at the time it adopted the NSR regulations in 1980. When commenting on the definition of "fugitive emissions," EPA offered the following reasoning in support of the definition:

This change will ensure that sources will not discharge as fugitive emissions, those emissions which could ordinarily be collected and discharged through stacks or other functionally equivalent openings, and will eliminate disincentives for the construction of duct work and stacks for the collection of emissions.

45 Fed. Reg. 52676 (August 7, 1980). By noting that emissions should not be treated as fugitive if they would ordinarily be collected, EPA identifies industry practice as an important factor to consider in evaluating whether emissions should be classified as fugitive. Another factor of importance to EPA can be derived from its Prevention of Significant Deterioration Workshop Manual, dated October 1980 (1980 Workshop Manual). In its discussion of the quantification of fugitive emissions as part of determining a source's potential emissions, EPA stated:

Common quantifiable fugitive emission sources include coal piles, road dust, and quarry emissions of particulate matter (PM). Other common quantifiable sources are fugitive hydrocarbon (HC) emissions from leaking refinery and organic chemical processing equipment.

1980 Workshop Manual at I-A-5. These illustrations demonstrate that if the source consisted of a large area which could not reasonably be enclosed, the emissions were considered fugitive. Consideration of these factors continued to be employed by EPA through the 1980s. For example, in a 1987 memorandum dealing with emissions from landfills, EPA stated:

The preamble to the 1980 NSR regulations characterizes non-fugitive emissions as ". . . those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings." Although there are some exceptions, it is our understanding that landfills are not ordinarily constructed with gas collection systems. Therefore, emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions and are not included in the NSR applicability determination.

Memorandum from Gerald A. Emison to David P. Howekamp (October 6, 1987)

In the case of the W.R. Meadows facility, similar sources were not collecting drying emissions in 1981. Moreover, the area over which the drying emissions occurred covered two acres. Therefore, based on the factors utilized by EPA contemporaneously with the initial permitting of the W.R. Meadows facility, the decision to classify the drying emissions from the saturated fiberboards as fugitive was appropriate.

To assess whether this classification of the drying emissions as fugitive emissions should change, MCESD reviewed recent case law, permitting actions in other jurisdictions, and current EPA guidance.

The definition of "fugitive emissions", which has not changed since the W.R. Meadows facility was originally permitted, was at issue in *United States v. Nucor Corporation*, 17 F.Supp.2d 1249 (N.D. Ala. 1998), *vacated on other grounds*, 2002 WL 32122510 (2002). In considering "what does and does not constitute fugitive emissions," the district court looked to whether the emissions "can be reasonably collected" as well as "what is ordinarily done." 17 F.Supp.2d at 1250. The quoted phrases are consistent with the two factors listed above, *i.e.*, industry practice and the area constituting the source of the emissions.

Current industry practice can be considered by examining permitting actions for similar sources in other jurisdictions. For example, W.R. Meadows owns and operates a facility in Cartersville, Georgia, which is similar to the facility in Goodyear. The facility manufactures fiber expansion joints and includes a saturation unit and unenclosed fiberboard drying area. The Georgia facility was issued a synthetic minor source permit, which requires W.R. Meadows to maintain VOC emissions from the facility below the 100 TPY "major source" threshold. The drying emissions are classified by the Georgia Department of Natural Resources as fugitive emissions, and no control of these emissions is required. Because the drying emissions are classified as fugitive, they are not counted in determining compliance

with the 100 TPY VOC emission limit. The facility was permitted in 1999, and a copy of the permit was sent to Region IV of EPA for review.

The Righte-Pointe Company owns and operates a facility in Dekalb, Illinois, which is also similar to the Goodyear facility. The facility manufactures asphalt-fiberboard construction joints and includes a saturation process and an unenclosed fiberboard curing area. The Illinois facility was issued a joint construction and operating permit in 1999 which imposes a facility-wide VOC emission limit of less than 100 TPY. While it appears that the curing emissions count towards determining compliance with the facility-wide emission limit, they are not required to be collected. The Illinois Environmental Protection Agency sent the joint construction and operating permit to Region V of EPA for review.

MCESD is not aware of any facilities which manufacture fiberboard material like the Goodyear facility where the drying emissions are classified as non-fugitive. Practice in the same industry and the approval by other jurisdictions supports the conclusion that the drying emissions at the Goodyear facility should continue to be treated as fugitive emissions.

MCESD has also considered current EPA guidance on fugitive emissions. Guidance referred to MCESD by EPA Region IX includes an EPA-internal memorandum dated February 10, 1999 from Thomas C. Curran to Judith M. Katz. That memorandum was referenced in a letter from Gerardo C. Rios to Dale Lieb dated July 10, 2002. As summarized by Mr. Rios, emissions are not considered to be fugitive if (1) the emissions are required to be collected by a national standard or are actually collected, (2) the emissions have been collected at other sources in the same source category, or (3) the emissions of similar activities have been collected at sources in different source categories. While EPA did not find the drying emissions at the W.R. Meadows facility to be non-fugitive based on either of the first two factors (which is consistent with MCESD's findings as described above), Region IX suggested that the emissions should be considered non-fugitive based on consideration of the third factor. In support of that conclusion, Region IX pointed to Rule 1175 adopted by the South Coast Air Quality Management District (SCAQMD) for the control of emissions from the manufacture of polymeric cellular (foam) products.

MCESD has considered Rule 1175 and the September 19, 1989 Staff Report prepared by the SCAQMD rule development division at the time that Rule 1175 was originally promulgated. Based on that review, there are noteworthy differences between the storage practices of, and emissions from, facilities subject to SCAQMD Rule 1175 and the Goodyear facility. First, the process descriptions and diagrams included in the SCAQMD Staff Report document that the manufacturing activities covered by the rule include storage of finished products. It appears from the Staff Report that such storage occurs inside warehouses or other structures and is a standard industry practice. This is unlike the W.R. Meadows situation, where the storage of the fiberboards occurs outside and covers a large area.

Second, the SCAQMD Staff Report also demonstrates that fugitive emissions from the finished foam product are significant for only the first 24 to 48 hours of storage. Based on a detailed cost analysis performed by SCAQMD, the requirement to collect emissions was reduced to a 48-hour period for expandable polystyrene operations

processing more than 800,000 lbs of raw materials per year, and further reduced to 24 hours for smaller operations. A review of the actual language of Rule 1175 confirms that the regulatory requirement to collect fugitive emissions from finished products while stored within the warehouse is not an indefinite requirement. Collection of fugitive emissions from inside the storage facilities is required only for a maximum 48 hours. In contrast to this period, the fiberboard materials at the Goodyear facility require a drying period of 4 weeks. Consequently, the size of the structure required for storage of the materials subject to Rule 1175 is substantially smaller than the size of the structure that would be required for the Goodyear facility.

Even though MCESD considers the differences between facilities subject to Rule 1175 and the Goodyear facility to be significant, it is EPA's policy, and MCESD concurs, that the drying emissions nonetheless should be captured if it is technically and economically feasible to do so. This is consistent with the above-referenced 1999 EPA guidance, which states that cost should be considered by a permitting authority in determining whether emissions can be reasonably collected. In order to make that assessment, MCESD requested W.R. Meadows to update an earlier study regarding the technical and economic feasibility of constructing a structure over the entire drying area and capturing the VOC emissions from the stored fiberboard material. The updated study is presented in a report entitled Revised Case by Case Analysis of Reasonably Available Control Technology (RACT), dated September 26, 2003. The updated study considered two methods for treatment of the captured VOC emissions. The two control options are thermal oxidation and catalytic oxidation. The annual cost for these two control methods are \$25,601/ton of VOC removed for thermal oxidation and \$18,714/ton of VOC removed for catalytic oxidation. On a discounted cash flow (present worth) basis, the costs are \$21,068/ton of VOC removed for thermal oxidation and \$15,660/ton of VOC removed for catalytic oxidation. In assessing whether a particular control technology would be cost effective for purposes of a RACT analysis, MCESD currently uses a cost figure in the range of \$7,000 to \$8,000/ton of VOC removed. As is evident, the annual cost for catalytic oxidation from the updated study is more than twice the cost used by MCESD in assessing what is reasonably available based on economic considerations, and three times the cost in the case of thermal oxidation.

The information available to Region IX at the time of preparing the above-referenced July 10, 2002 letter to MCESD and a subsequent letter dated June 26, 2003 from Gerardo C. Rios to Bob Evans consisted of a 1997 cost analysis prepared by W.R. Meadows. The 1997 analysis estimated the annual cost of control at \$9,716/ton of VOC removed for catalytic oxidation, and \$10,826/ton of VOC removed for a refrigeration condenser. In comparing costs from the two studies, the cost from the 2003 study for catalytic oxidation is approximately twice the cost of the 1997 estimate considered by Region IX. The 2003 updated cost analysis is based on EPA's Office of Air Quality Planning and Standards Control Cost Manual (January 2002, Sixth Edition), and is considered to be a reliable analysis under today's regulatory guidance.

In summary, the original decision in 1981 to classify the drying emissions from the saturated fiberboards as fugitive was appropriate. In addition, in view of the current cost of control, the standard industry practice for similar sources, and the noteworthy differences between the Goodyear facility and facilities subject to Rule 1175,

MCESD believes there is a reasonable basis for retaining the original classification of the drying emissions at the Goodyear facility as fugitive emissions. MCESD is also mindful, however, of the suggestions and comments from Region IX on this matter. Accordingly, MCESD is adopting the following approach.

At this time W.R. Meadows is seeking a Title V permit for its facility. As noted above, the facility is required to obtain a Title V permit because its emissions exceed the major source threshold of 50 TPY without regard to whether the drying emissions are classified as fugitive or non-fugitive. EPA has previously stated:

[T]itle V does not impose any requirements on . . . sources to collect (or control) their emissions . . . . Thus, no source will ever be required to incur the costs of installing, operating, or maintaining collection devices (or control devices) because of a presumption that its emissions are not fugitive or subsequently because it is found to be subject to Title V.

Memorandum from Thomas C. Curran to Judith M. Katz, dated February 10, 1999. In view of EPA's statement, and the fact that W.R. Meadows is already required to obtain a Title V permit, there is no need at this time to make a final decision regarding what the present classification of the drying emissions should be. If and when W.R. Meadows proposes a modification to its facility, MCESD will assess, under the relevant case law, regulations, industry practice, and guidance then existing, whether the classification of such emissions should change from that made in 1981.

#### I. Reporting (County Rule 210 302.1e(1), 40 CFR 60.747 and SIP Rule 30)

Reporting Requirements for the facility are found in the General Conditions of the Permit (1-17) and in Subsection 21 of the Permit.

1. Subsection 21 requires the submission of a semi-annual monitoring report, including deviation reporting. The deviation section of the report should be very detailed and should include information such as any day, week or month that any monitoring was required but not performed, a reason for those deviations, and any action taken to ensure that the monitoring will be performed in the future. Additionally, deviations from specified operating ranges or emission limits or standards should be included, with any additional information. To allow the Permittee flexibility in coordinating the filing of semiannual monitoring reports with the other data gathering and reporting activities at the facility, the Permittee may select the initial reporting period to be less than 6 months. However, follow-up reporting periods must be in 6-month intervals starting from the end of the initial reporting period.

The monitoring report shall also contain:

#### a) Visible Emissions

1) Dates on which visible emissions observations were taken;

- 2) Name of the observer:
- 3) Whether or not visible emissions were present:
- 4) The opacity of visual emissions determined by a Method 9 reading, if applicable;
- 5) description of any corrective actions taken, including the date taken, if applicable; and
- 6) The name of individual certified as a visible emissions evaluator, the date of last certification, and company/agency providing the certification
- 7) Any other related information.

#### (Permit Condition 21.A.1))

#### b) Odor Log

The Permittee shall include a copy of the portion of the odor log which covers the applicable 6 month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

#### (Permit Condition 21.A.2), locally enforceable only)

c) The Permittee shall include the results of the monthly and the rolling 12-month VOC emissions rate calculations for each month in the six-months reporting period applicable to the emission limit from Permit Condition 18.B.1).

#### (Permit Condition 21.B.)

- d) The Permittee shall include the following in the semiannual compliance report applicable to the Cure Plant:
  - 1) A material list showing VOC content in lb/gallon of each coating subject to County Rule 335 and Permit Condition 19.C.1) of this Permit used during the reporting period.
  - 2) A list of the coatings which are exempt from the volatile organic compounds content requirements and a reason for the exemption.

(Permit Condition 21.D.)

e) The Permittee shall include the results of the monthly and the rolling 12-month Board production rate calculations for each month in the six-months reporting period applicable to the saturator unit production limit.

(Permit Condition 21.F.)

#### J. Testing (**Permit Condition 24.F.**)

1. Performance testing of the ECS that will be installed on the Saturator Unit will be required to verify compliance with RACT requirements. The performance test will verify the VOC destruction or control efficiency from the ECS and also the NOx emission rate and CO emission rate if a Thermal Oxidizer is used.

Maricopa County Rule 200§309.2 a) thru e) requires that the Control Officer make certain findings in writing before requiring emission testing. The necessity to require testing is substantiated as follows:

- A. The facility will be emitting VOC and also NOx and CO if a Thermal Oxidizer is used. It has been determined by the USEPA that exposure to these pollutants may adversely affect human health.
- B. The test methods to be used are 25A for VOC and 7E and 10 for NOx and CO respectively. These are EPA approved test methods shown to produce scientifically acceptable results.
- C. The test methods to be used have been shown to be technically feasible.
- D. The test methods to be used have been shown to be reasonably accurate.
- E. After examining the estimated cost of the test, the Department believes that the cost of a stack-sampling test of the control device performance is reasonable to determine the effectiveness of the control device, and to demonstrate compliance with the permit limitations.

#### K. Other Requirements

1. The Facility shall submit a Dust Control Plan and get it approved before commencing any routine dust generating operations. This would be for example, for routine bulk material loading, weed abatement by discing or blading, earthmoving not associated with construction (This requires a separate Earthmoving Permit), etc. A dust control plan was submitted for the covered fugitive dust generation operations in the permit. Other conditions concerning existing and future dust control plans are included.

#### VI. NON-APPLICABLE REGULATIONS

**County Rule 340 – Cutback Asphalt** – WR Meadows does not use cutback asphalt in any of the applications specified in this rule and therefore, this rule does not apply to them

**40 CFR 60 Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture** - WR Meadows does not make asphalt roofing products nor does it conduct asphalt processing as defined in this rule.

**40 CFR 63 Subpart LLLLL – MACT Standard for Asphalt Processing and Asphalt Roofing Manufacture** – WR Meadows does not do asphalt processing as its defined in this Subpart. Nor does it make asphalt roofing products.

WR Meadows identified no other NSPS or MACT Standards currently applicable to them.

## VII. COMPLIANCE ASSURANCE MONITORING (40 CFR 64)

The Saturator Unit does have pre-control PTE greater than the major source level for VOCs. This equipment is subject to RACT and it will comply through the use of an ECS with 85% overall reduction of VOC emissions. For the Saturator Unit, the post control potential to emit (considering the production limit in the permit) is below the major source threshold for VOCs. Therefore CAM may be submitted with the Title V renewal application. No other emission units use a control device to achieve compliance with an emission limit. Therefore, CAM would not apply to those units.